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FILE COVERS 1907 - 26 Apr 2002  VOL 136 ISS 18
FILE LAST UPDATED: 25 Apr 2002  (20020425/ED)

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information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

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L1                STR
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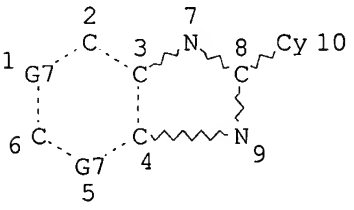


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NUMBER OF NODES IS  10

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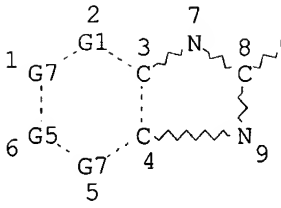

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O~C @24 25

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VAR G5=CH/22
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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
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STEREO ATTRIBUTES: NONE
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L6 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L5(L)(?DIABET? OR BLOOD(W)SUGAR)

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=>

=> d ibib abs hitrn l6 1-15

L6 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:51257 HCAPLUS
DOCUMENT NUMBER: 136:123595
TITLE: A combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for the treatment of diabetes
INVENTOR(S): Van Poelje, Paul D.; Erion, Mark D.; Fujiwara, Toshihiko
PATENT ASSIGNEE(S): Metabasis Therapeutics, Inc., USA; Sankyo Company, Limited
SOURCE: PCT Int. Appl., 392 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002003978	A2	20020117	WO 2001-US21557	20010705

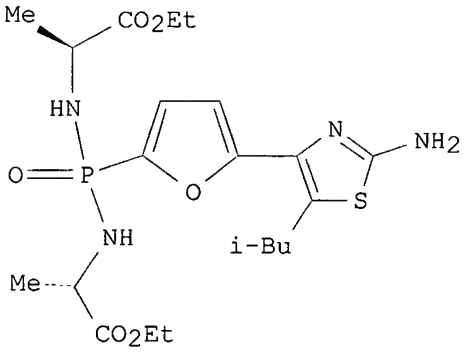
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-216531P P 20000706

OTHER SOURCE(S): MARPAT 136:123595

GI



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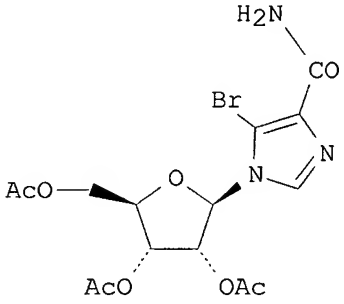


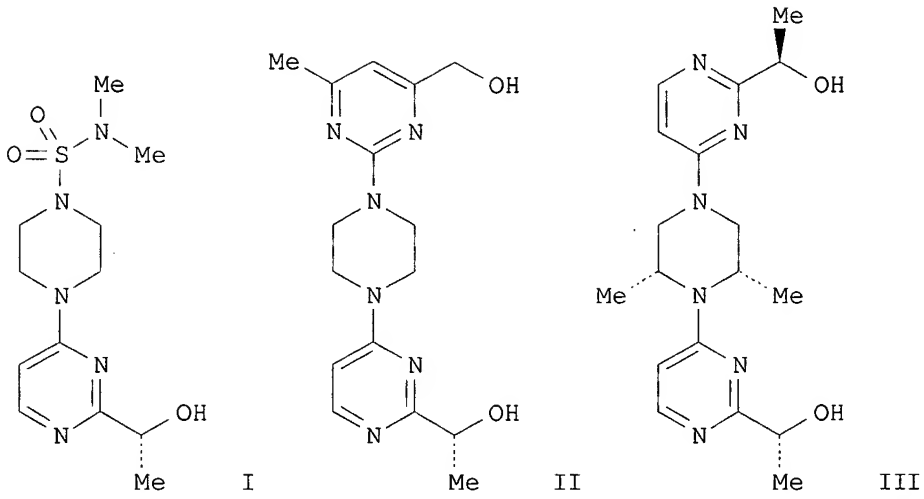
II

AB A combination therapy of at least one FBPase inhibitor ((R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M; e.g. 2-amino-5-propylthio-4-(5-phosphono-2-furanyl)thiazole monohydrobromide and 2-amino-5-isobutyl-4-[2-[N,N'-bis[(S)-1-(ethoxycarbonyl)ethyl]phosphonodiamido]-5-furanyl]thiazole (shown as I)) and at least one other antidiabetic agent (insulin secretagogue; e.g. glyburide, a sulfonylurea) is disclosed. (R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M are converted in vivo or in vitro to MPO32-, which inhibit FBPase; the substituents are defined in the claims. General methods and about 15 specific example prepns. of the phosphorus compds. are included but no methods of prepn. are claimed. In the biol. examples, data is presented for the following for selected phosphorus compds. and other materials: inhibition of human liver FBPase, inhibition of rat liver and mouse liver FBPase, inhibition of gluconeogenesis by an FBPase inhibitor in rat hepatocytes, inhibition of glucose prodn. and elevation of fructose-1,6-bisphosphate levels in rat hepatocytes treated with FBPase inhibitors, anal. of hepatic and plasma drug metabolite levels, blood glucose, and hepatic fructose 1,6-bisphosphate levels after administration of compd. A (shown as II) p.o. to normal fasted rats, anal. of hepatic and plasma drug levels after administration of compds. i.p. to normal fasted rats, oral bioavailability detn. of two compds. and oral glucose lowering activity of two compds. For insulin secretagogues: insulin release from pancreatic islets, glucose lowering in the fasted rat, i.v. glucose tolerance in the fasted rat, oral glucose tolerance in the Zucker diabetic fatty rat, insulin secretion in the rat, inhibition of KATP-channels in mouse pancreatic beta-cells, and sulfonylurea receptor binding. Also included are: inhibition of

dipeptidyl peptidase IV (DPP-IV inhibitors), alpha-glucosidase assay, glycogen phosphorylase assay, assay of glucose 6-phosphatase inhibitors, glucagon antagonist assay, amylin agonist assay, fatty acid oxidn. inhibitor assay, glucose lowering in the db/db mouse (FBPase inhibitor), glucose lowering in the ZDF rat, acute combination treatment of an insulin secretagogue and an FBPase inhibitor in the ZDF rat, chronic combination treatment of an insulin secretagogue and an FBPase inhibitor in the ZDF rat, acute combination treatment of insulin and an FBPase inhibitor in db/db mice, beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db mice, and beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db Mice. Also included are: acute combination treatment of insulin and an FBPase inhibitor in the Goto-Kakizaki rat, acute combination treatment of a biguanide and an FBPase inhibitor in db/db mice, acute combination treatment of an alpha glucosidase inhibitor and an FBPase inhibitor in Goto-Kakizaki rats, acute combination treatment of a glycogen phosphorylase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of a glucose-6-phosphatase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of an FBPase inhibitor and an amylin agonist, chronic combination treatment of a fatty acid oxidn. inhibitor and an FBPase inhibitor in the streptozotocin-induced diabetic rat.

IT **213247-37-1**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination of phosphonate or phosphorodiamidate FBPase inhibitors and **antidiabetic** agents useful for treatment of **diabetes**)

L6 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:916027 HCAPLUS
DOCUMENT NUMBER: 136:200160
TITLE: Orally-Effective, Long-Acting Sorbitol Dehydrogenase Inhibitors: Synthesis, Structure-Activity Relationships, and in Vivo Evaluations of Novel Heterocycle-Substituted Piperazino-Pyrimidines
AUTHOR(S): Chu-Moyer, Margaret Y.; Ballinger, William E.; Beebe, David A.; Berger, Richard; Coutcher, James B.; Day, Wesley W.; Li, Jiancheng; Mylari, Banavara L.; Oates, Peter J.; Weekly, R. Matthew
CORPORATE SOURCE: Departments of Cardiovascular and Metabolic Disease and Drug Metabolism Development, Pfizer Global Research and Development, Groton Laboratories, Groton, CT, 06340, USA
SOURCE: Journal of Medicinal Chemistry (2002), 45(2), 511-528
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I II III

AB Optimization of a previously disclosed sorbitol dehydrogenase inhibitor (SDI, I) for potency and duration of action was achieved by replacing the metabolically labile N,N-dimethylsulfamoyl group with a variety of heterocycles. Specifically, this effort led to a series of novel, in vitro potent SDI's, e.g. the [[(hydroxymethylpyrimidinyl)piperazinyl]pyrimidinyl]ethanol II, with longer serum half-lives and acceptable in vivo activity in acutely diabetic rats. However, the desired in vivo potency in chronically diabetic rats, ED90 .ltoreq. 5 mg/kg/day, was achieved only through further modification of the piperazine linker. Several members of this family, including [[(hydroxyethylpyrimidinyl)dimethylpiperazinyl]pyrimidinyl]ethanol III, showed better than the targeted potency with ED90 values of 1-2 mg/kg/day. III was further profiled and found to be a selective inhibitor of sorbitol dehydrogenase, with excellent pharmacodynamic/pharmacokinetic properties, demonstrating normalization of sciatic nerve fructose in a chronically diabetic rat model for .apprx.17 h, when administered orally at a single dose of 2 mg/kg/day.

IT **400785-12-8P 400785-22-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and structure-activity relationships of oral **antidiabetic**, sorbitol dehydrogenase-inhibiting heterocylic piperazinopyrimidines)

IT **57260-68-1 145909-56-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and structure-activity relationships of oral **antidiabetic**, sorbitol dehydrogenase-inhibiting heterocylic piperazinopyrimidines)

IT **400785-04-8P 400785-05-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and structure-activity relationships of oral **antidiabetic**, sorbitol dehydrogenase-inhibiting heterocylic piperazinopyrimidines)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:824351 HCAPLUS
DOCUMENT NUMBER: 136:112467
TITLE: Effect of telmisartan on arterial distensibility and central blood pressure in patients with mild to moderate hypertension and type 2 diabetes mellitus
AUTHOR(S): Asmar, Roland
CORPORATE SOURCE: The Cardiovascular Institute, Paris, 75016, Fr.
SOURCE: JRAAS (2001), 2(Suppl. 2), S8-S11
CODEN: JRAAAG; ISSN: 1470-3203
PUBLISHER: JRAAS Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Arterial wall stiffness is an important independent risk factor for cardiovascular disease in hypertensive patients, which is further exacerbated by co-existent diabetes mellitus. Increased arterial stiffness is directly assocd. with an increase in pulse wave velocity (PWV) and indirectly with increased central and peripheral blood pressure. Following a two-week placebo run-in period, 27 patients with mild to moderate essential hypertension and Type 2 diabetes mellitus, were randomized to once daily treatment with either telmisartan 40 mg or placebo for three weeks, and after a two-week washout period, crossed-over to the alternative treatment for a further three weeks. Carotid/femoral and carotid/radial PWV were measured non-invasively using the automatic Complior device, and central parameters (central blood pressure, pulse contour anal., and augmentation index) were measured using the SphygmoCor system, at the start and end of each treatment period. Compared with placebo, treatment with telmisartan significantly reduced carotid/femoral PWV (mean adjusted treatment difference -0.95 m/s, 95% confidence intervals: -1.67, -0.23 m/s, p=0.013), as well as peripheral and central diastolic, systolic and pulse pressure. In conclusion, the results of this study show that telmisartan is effective in reducing arterial stiffness in hypertensive patients with Type 2 diabetes mellitus, and may potentially have beneficial effects on cardiovascular outcomes, beyond blood-pressure lowering effects, in this patient group.

IT **144701-48-4**, Telmisartan
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(telmisartan effect on arterial distensibility and central blood pressure in patients with hypertension and type 2 **diabetes** mellitus)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:759575 HCAPLUS
DOCUMENT NUMBER: 135:298797
TITLE: Synergistic effect of a sulfonylurea and/or non-sulfonylurea K+ ATP channel blocker, and a phosphodiesterase 3 type inhibitor for the treatment of non-insulin-dependent diabetes or other conditions
INVENTOR(S): Fryburg, David Albert; Parker, Janice Catherine
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1145717	A2	20011017	EP 2001-303020	20010330
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002013268	A1	20020131	US 2001-829874	20010410
BR 2001001461	A	20011113	BR 2001-1461	20010411
JP 2001354568	A2	20011225	JP 2001-115674	20010413

PRIORITY APPLN. INFO.: US 2000-196728P P 20000413

AB The invention provides the use of a synergistic amt. of (1) a sulfonylurea, a non-sulfonylurea K+ ATP channel blocker, or a sulfonylurea and a non-sulfonylurea K+ ATP channel blocker; and (2) a cAMP phosphodiesterase type 3 inhibitor; for the manuf. of medicaments for treating or preventing non-insulin-dependent diabetes mellitus, insulin resistance, Syndrome X, diabetic neuropathy, diabetic nephropathy, diabetic retinopathy, diabetic cardiomyopathy, polycystic ovary syndrome, cataracts, hyperglycemia, or impaired glucose tolerance. The invention also provides kits and pharmaceutical compns. that comprise (1) a sulfonylurea, a non-sulfonylurea K+ ATP channel blocker, or a sulfonylurea and a non-sulfonylurea K+ ATP channel blocker: and (2) a cAMP phosphodiesterase type 3 inhibitor. The invention further provides kits and pharmaceutical compns. that comprise (1) a sulfonylurea, a non-sulfonylurea K+ ATP channel blocker, or a sulfonylurea and a non-sulfonylurea K+ ATP channel blocker: (2) a cAMP phosphodiesterase type 3 inhibitor; and (3) an addnl. compd. useful for the treatment of non-insulin-dependent diabetes mellitus, insulin resistance, Syndrome X, diabetic neuropathy, diabetic nephropathy, diabetic retinopathy, diabetic cardiomyopathy, polycystic ovary syndrome, cataracts, hyperglycemia, or impaired glucose tolerance.

IT **73384-60-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sulfonylurea and/or non-sulfonylurea K+ ATP channel blocker and phosphodiesterase 3 type inhibitor synergism for treatment of non-insulin-dependent **diabetes** or other conditions)

L6 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:376495 HCAPLUS
DOCUMENT NUMBER: 135:236137
TITLE: The role of angiotensin II receptor antagonists in the management of diabetes
AUTHOR(S): Barnett, Anthony H.
CORPORATE SOURCE: Birmingham Heartlands Hospital, Birmingham, UK
SOURCE: Blood Pressure, Supplement (2001), (1), 21-26
CODEN: BPSUEY; ISSN: 0803-8023
PUBLISHER: Taylor & Francis
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Diabetic nephropathy, which develops in about 30% of patients with diabetes, is a progressive condition. It is characterized by increased blood pressure, declining glomerular filtration rate and albuminuria. Lowering of blood pressure in diabetic patients is assocd. with reduced cardiovascular risk and renal protection. Inhibitors of angiotensin-converting enzyme (ACE) are the current gold std. treatment for hypertension in patients with type I diabetes because, in addn. to their blood pressure lowering ability, they are thought to oppose the increased intraglomerular pressure that is mediated in part by angiotensin II. The angiotensin II receptor antagonists, a more recently developed

class of antihypertensive agents, appear to be as effective as ACE inhibitors in delaying the progression of renal injury in animal models of diabetes. They act by selectively blocking the binding of angiotensin II to the AT1 receptor and may, therefore, offer a more complete blockade of the renin-angiotensin system than ACE inhibitors. The renal and antihypertensive effects of this class of drug in patients with diabetes are now being investigated in long-term clin. trials. The multicenter Diabetics Exposed to Telmisartan And EnalaprIL (DETAIL) study is a randomized, double-blind, parallel-group comparison of the renal and antihypertensive effects of the angiotensin II receptor antagonist telmisartan and the ACE inhibitor enalapril in 272 patients with type II diabetes. The primary outcome is change in glomerular filtration rate over the 5 yr of the study.

IT **144701-48-4**, Telmisartan
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(role of angiotensin II receptor antagonists in management of **diabetes**)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:306863 HCAPLUS
DOCUMENT NUMBER: 135:251642
TITLE: Comparative antihypertensive and renoprotective effects of telmisartan and lisinopril after long-term treatment in hypertensive diabetic rats
AUTHOR(S): Wienen, Wolfgang; Richard, Serge; Champeroux, Pascal; Audeval-Gerard, Chantal
CORPORATE SOURCE: Department of Pharma Research, Boehringer Ingelheim Pharma KG, Biberach, Germany
SOURCE: JRAAS (2001), 2(1), 31-36
CODEN: JRAAAG; ISSN: 1470-3203
PUBLISHER: JRAAS Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This study compared the cardiovascular and renal effects of long-term telmisartan (3 and 10 mg/kg/day) and lisinopril (10 mg/kg/day) in an animal model combining hypertension and diabetes mellitus. It was a parallel-group study of diabetic, spontaneously hypertensive rats (SHR), treated with control or active treatment for eight months. A non-diabetic SHR control group was run in parallel. Diabetes was induced by streptozotocin (45 mg/kg i.v.) in SHRs aged 9-10 wk. Animals were treated with telmisartan (3 or 10 mg/kg/day), lisinopril (10 mg/kg/day) or vehicle. Plasma glucose levels, blood pressure (BP), and urinary protein and albumin excretion were measured monthly. Telmisartan treatment significantly reduced BP of diabetic SHRs in a dose-dependent manner ($p<0.05$, low-dose, n=18; $p<0.01$, high-dose, n=15). The BP redn. in the lisinopril group was similar to that in the telmisartan 10 mg/kg/day group. Compared with non-diabetic SHRs, untreated diabetic SHRs developed severe proteinuria and albuminuria over the exptl. period ($p<0.01$). In diabetic SHRs, proteinuria and albuminuria were dose-dependently and significantly attenuated by treatment with telmisartan ($p<0.01$ with the higher dose) and lisinopril ($p<0.01$). Compared with the untreated diabetic SHRs, cardiac hypertrophy was significantly reduced after treatment with both doses of telmisartan and with lisinopril. Telmisartan, 10 mg/kg/day, but not lisinopril, significantly attenuated the diabetes-induced increase in glomerular vol. In conclusion,

telmisartan, 10 mg/kg/day, is at least as beneficial as lisinopril, 10 mg/kg/day, in lowering BP, reducing cardiac hypertrophy and attenuating renal excretion of protein and albumin in this model.

IT **144701-48-4**, Telmisartan
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparative antihypertensive, renoprotective, and cardioprotective effects of telmisartan and lisinopril after long-term treatment in hypertensive **diabetic** rats)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:167787 HCAPLUS
DOCUMENT NUMBER: 134:202715
TITLE: Pharmaceutical formulations of ACE and ATII inhibitors for prevention of stroke, diabetes and/or congestive heart failure
INVENTOR(S): Schoelkens, Bernward; Bender, Norbert; Rangoonwala, Badrudin; Dagenais, Gilles; Gerstein, Hertzel; Ljunggren, Anders; Yusuf, Salim
PATENT ASSIGNEE(S): Aventis Pharma Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015673	A2	20010308	WO 2000-EP8341	20000825
WO 2001015673	A3	20020307		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: SE 1999-3028 A 19990827

AB The present invention relates to use of an inhibitor of the renin-angiotensin system (RAS), i.e., inhibitors of angiotensin-converting enzyme (ACE) and angiotensin II type 1 receptor (ATII) antagonists or a pharmaceutically acceptable deriv. thereof, particularly ramipril or ramiprilat, in the manuf. of a medicament for the prevention and/or treatment of stroke, diabetes and/or congestive heart failure (CHF). A large-scale clin. trial was designed to examine the effect of the ACE inhibitor ramipril vs. placebo in reducing cardiovascular events. There was a clear 32% redn. in the ramipril group in the no. of patients who developed a stroke, and this is surprising since patients were normotensive when recruited to the study. The no. of patients who developed CHF was significantly reduced by 21% in the ramipril group, which is unexpected since patients had no signs or symptoms of CHF at study start. Equally surprising is the marked 36% redn. in the no. of patients who developed diabetes in the ramipril group.

IT **144701-48-4**, Telmisartan
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. of inhibitors of renin-angiotensin system for prevention and/or treatment of stroke, **diabetes** and/or congestive heart failure)

L6 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:31502 HCAPLUS
DOCUMENT NUMBER: 134:100881
TITLE: Preparation of fused imidazole compounds and remedies for diabetes mellitus
INVENTOR(S): Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji; Watanabe, Nobuhisa; Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Oohashi, Kaya; Minami, Hiroe; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi; Tanaka, Isao; Kawata, Tsutomu; Shimomura, Naoyuki; Akamatsu, Hirofumi; Ozeki, Naoki; Shimizu, Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi, Shigeto; Naito, Toshihiko
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002400	A1	20010111	WO 2000-JP4358	20000630

W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: JP 1999-188484 A 19990702
JP 2000-143495 A 20000516
JP 2000-182786 A 20000619
OTHER SOURCE(S): MARPAT 134:100881
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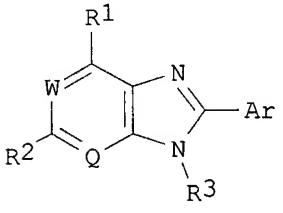


I

AB Novel fused imidazole compds. such as purine derivs. of general formula (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un)substituted C1-8 alkyl, (un)substituted NH2; R2 = H, halo, (un)substituted NH2, (un)substituted C2-8 alkenyl, (un)substituted C3-8 alkynyl, (un)substituted C1-8 alkyl; R3 = (un)substituted C3-8 alkynyl, C3-8 alkenyl, (un)substituted C1-8 alkyl, (un)substituted aryl,

(un)substituted heteroaryl, etc.; Ar = (un)substituted aryl, (un)substituted heteroaryl, optionally halo- or C1-6 alkyl-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; Q, W = N, CH; some proviso are given] are prepd. These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of diabetes mellitus and complications of diabetes. Thus, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temp. for 1 h, ice-cooled, treated with NaH at 0-6.degree. for 30 min, and methylated by Me iodide at room temp. for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2-pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to 47.3.+-.7.2% of the control animal.

IT **318468-06-3P 318468-10-9P 318468-11-0P**
318468-12-1P 318468-13-2P 318468-14-3P
318468-15-4P 318468-16-5P 318468-17-6P
318468-21-2P 318468-25-6P 318468-28-9P
318468-29-0P 318468-30-3P 318468-31-4P
318468-41-6P 318468-42-7P 318468-43-8P
318468-44-9P 318468-46-1P 318468-47-2P
318468-48-3P 318468-49-4P 318468-50-7P
318468-51-8P 318468-52-9P 318468-53-0P
318468-56-3P 318468-57-4P 318468-58-5P
318468-59-6P 318468-60-9P 318468-61-0P
318468-62-1P 318468-63-2P 318468-64-3P
318468-65-4P 318468-69-8P 318468-70-1P
318468-71-2P 318468-72-3P 318468-78-9P
318468-83-6P 318468-84-7P 318468-85-8P
318468-86-9P 318468-87-0P 318468-88-1P
318468-95-0P 318468-98-3P 318469-02-2P
318469-03-3P 318469-04-4P. 318469-07-7P
318469-08-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of fused imidazole compds. as antagonists of adenosine A2 receptors and remedies for **diabetes** mellitus)

IT **318468-40-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of fused imidazole compds. as antagonists of adenosine A2 receptors and remedies for **diabetes** mellitus)

IT **318468-09-6P 318468-19-8P 318468-20-1P**
318468-26-7P 318468-54-1P 318468-68-7P
318468-76-7P 318468-82-5P 318468-92-7P
318468-93-8P 318468-94-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of fused imidazole compds. as antagonists of adenosine A2 receptors and remedies for **diabetes** mellitus)

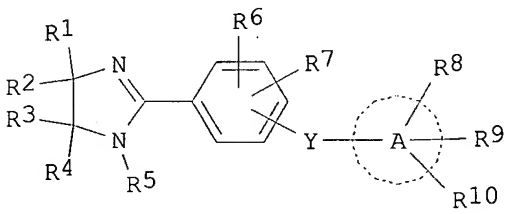
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:911225 HCAPLUS
DOCUMENT NUMBER: 134:71593
TITLE: Preparation of imidazoline derivatives for the treatment of diabetes, especially type II diabetes
INVENTOR(S): Paal, Michael; Ruehter, Gerd; Schotten, Theo
PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 143 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078726	A1	20001228	WO 2000-US11881	20000619
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2351081	A1	20001220	GB 1999-14222	19990618

PRIORITY APPLN. INFO.: GB 1999-14222 A 19990618
OTHER SOURCE(S): MARPAT 134:71593
GI



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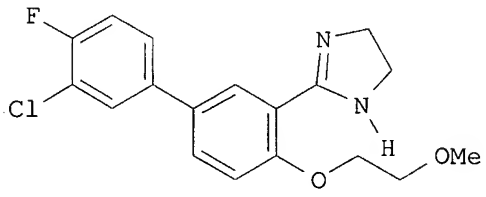

II

AB The title compds. [I; R1-R4 = H, alkyl; R1 and R3, together with the carbon atoms to which they are attached, combine to form a C3-7 carbocyclic ring and R2 and R4 = H, alkyl; R1 and R2, together with the carbon atom to which they are attached combine to form a C3-7 spirocarbocyclic ring and R3 and R4 = H, alkyl; R3 and R4, together with the carbon atom to which they are attached combine to form a C3-7 spirocarbocyclic ring and R1 and R2 = H, alkyl; R5 = H, alkyl, aryl, etc.; R6 = H, alkyl, alkoxy, etc.; R7 = H, alkyl, alkoxy, etc.; Y = NHCONH, NHCO, a bond, etc.; A = a monocyclic or bicyclic ring; R8 = H, alkyl, alkenyl, etc.; R9, R10 = H, alkyl, alkoxy, etc.], useful for the treatment of diabetes, diabetic complications, metabolic disorders, or related diseases where impaired glucose disposal is present (no data), were prepd. and formulated. E.g., a multi-step synthesis of the imidazoline II.HCl was given. The compds. I are effective at 0.1-5 mg/kg/day.

IT **314240-70-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of imidazoline derivs. as **antidiabetics**)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:456867 HCAPLUS
DOCUMENT NUMBER: 133:84284
TITLE: A combination of fructose-1,6-bisphosphatase (FBPase) inhibitors and insulin sensitizers for the treatment of diabetes
INVENTOR(S): Erion, Mark D.; Vanpoelje, Paul
PATENT ASSIGNEE(S): Metabasis Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 306 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038666	A2	20000706	WO 1999-US30713	19991222
WO 2000038666	A3	20011129		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1143955	A2	20011017	EP 1999-964313	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9917005	A	20020402	BR 1999-17005	19991222
NO 2001003115	A	20010824	NO 2001-3115	20010621

PRIORITY APPLN. INFO.: US 1998-114718P P 19981224
WO 1999-US30713 W 19991222
OTHER SOURCE(S): MARPAT 133:84284
AB Pharmaceutical compns. contg. an FBPase inhibitor and an insulin sensitizer are provided as well as methods for treating diabetes and diseases responding to increased glycemic control, an improvement in insulin sensitivity, a redn. in insulin levels, or an enhancement of insulin secretion.
IT **213247-37-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fructose-1,6-bisphosphatase inhibitor-insulin sensitizer combination for **diabetes** treatment, and inhibitor prepn.)

L6 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:451298 HCAPLUS
DOCUMENT NUMBER: 131:116251

TITLE: Preparation of purine derivatives as adenosine A2 receptor antagonists for the treatment of diabetes

INVENTOR(S): Asano, Osamu; Harada, Hitoshi; Hoshino, Yorihisa; Yoshikawa, Seiji; Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Nagata, Kaya; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi

PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan

SOURCE: PCT Int. Appl., 167 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9935147	A1	19990715	WO 1998-JP5870	19981224
W: AU, BR, CA, CN, HU, KR, MX, NO, NZ, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 11263789	A2	19990928	JP 1998-363938	19981222
CA 2315736	AA	19990715	CA 1998-2315736	19981224
AU 9916885	A1	19990726	AU 1999-16885	19981224
EP 1054012	A1	20001122	EP 1998-961528	19981224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: JP 1998-526 A 19980105
WO 1998-JP5870 W 19981224

OTHER SOURCE(S): MARPAT 131:116251

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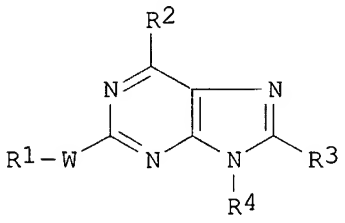

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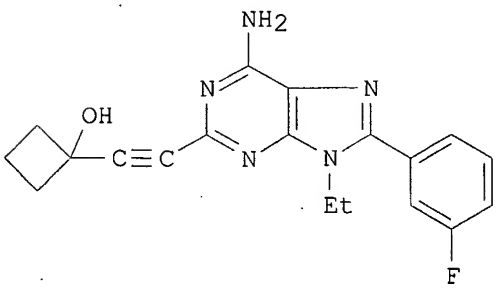


II

AB The title compds. I [R1 = (un)substituted arom. ring (which may contain heteroatom), etc.; W = CH2CH2, etc.; R2 = H, (un)substituted alkyl, etc.;

R3 = H, (un)substituted cycloalkyl, etc.; R4 = H, (un)substituted alkyl, heteroaryl, etc.; a proviso is given] are prepd. In an in vitro test for A2a receptor antagonism, the title compd. II showed the Ki value of 0.002 .mu.M.

IT **232255-09-3P 232255-10-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of purine derivs. as adenosine A2 receptor antagonists for treatment of **diabetes**)

IT **232255-07-1 232255-08-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of purine derivs. as adenosine A2 receptor antagonists for treatment of **diabetes**)

IT **232254-90-9P 232254-91-0P 232254-93-2P**
232254-94-3P 232254-96-5P 232254-97-6P
232254-99-8P 232255-00-4P 232255-01-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of purine derivs. as adenosine A2 receptor antagonists for treatment of **diabetes**)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:216939 HCAPLUS
DOCUMENT NUMBER: 130:247048
TITLE: Composition for treating diabetes mellitus and obesity
INVENTOR(S): Forssmann, Wolf Georg; Richter, Rudolf; Adermann, Knut; Meyer, Markus
PATENT ASSIGNEE(S): Germany
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9914239	A1	19990325	WO 1998-EP5804	19980911
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19810515	A1	19991007	DE 1998-19810515	19980311
EP 1012188	A1	20000628	EP 1998-950026	19980911
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 2001516765	T2	20011002	JP 2000-511787	19980911

PRIORITY APPLN. INFO.:
DE 1997-19740081 A 19970912
DE 1997-19757739 A 19971223
DE 1998-19810515 A 19980311
WO 1998-EP5804 W 19980911

AB A combination of .gtoreq.2 of (a) .gtoreq.1 hormone which stimulates cAMP prodn., (b) .gtoreq.1 substance which inhibits the breakdown of a cyclic nucleotide, and (c) .gtoreq.1 hormone which stimulates cGMP prodn. is superior to any of these substances alone in stimulating insulin secretion and decreasing the blood glucose level. Component (a) is an analog or deriv. of glucagon-like peptide 1, (b) is a phosphodiesterase inhibitor, and (c) is a guanylate cyclase C-activating peptide, esp. a guanylin or

uroguanylin fragment. These may be combined with addnl. peptide hormones which affect islet cell secretion (no data).

IT **73384-60-8**, Sulmazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide compn. for treating **diabetes** mellitus and obesity)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:738236 HCAPLUS
DOCUMENT NUMBER: 128:21399
TITLE: Angiotensin blockade improves cardiac and renal complications of type II diabetic rats
AUTHOR(S): Kim, Shokei; Wanibuchi, Hideki; Hamaguchi, Akinori; Miura, Katsuyuki; Yamanaka, Shinya; Iwao, Hiroshi
CORPORATE SOURCE: Department of Pharmacology, Osaka City University Medical School, Osaka, 545, Japan
SOURCE: Hypertension (Dallas) (1997), 30(5), 1054-1061
CODEN: HPRTDN; ISSN: 0194-911X
PUBLISHER: American Heart Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Using Otsuka Long-Evans Tokushima Fatty (OLETF) rats, a new model of human non-insulin-dependent diabetes mellitus (NIDDM), the authors examd. the role of local angiotensin II in cardiovascular and renal complications of NIDDM. OLETF rats were orally given cilazapril (an angiotensin-converting enzyme inhibitor, 1 or 10 mg/kg), E4177 (an angiotensin AT1 receptor antagonist, 10 mg/kg), or vehicle for 26 or 40 wk (from the age of 20 to 46 or 60 wk). Cardiac mRNAs were measured by Northern blot anal., and the thickening of the coronary arterial wall and the degree of perivascular fibrosis were detd. by an image analyzer. Cilazapril or E4177 did not significantly affect body wt. or plasma glucose and insulin levels of OLETF rats, indicating the minor effects on diabetes itself. However, both drugs significantly and similarly prevented coronary microvascular remodeling (the increase in wall thickening and perivascular fibrosis in coronary arterioles and small coronary arteries) in OLETF rats, and they were assocd. with the suppression of cardiac transforming growth factor-.beta.1 expression. Both drugs suppressed not only the increase in left ventricular wt. but also the downregulation of cardiac .alpha.-myosin heavy chain expression in OLETF rats. Glomerulosclerosis and glomerular hypertrophy in OLETF rats were improved by cilazapril and E4177 to a comparable extent. These results, taken together with the fact that OLETF rats show normal plasma renin levels, support that the AT1 receptor is involved in the pathogenesis of cardiac and renal complications in NIDDM.

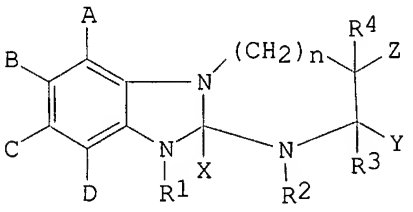
IT **135070-05-2**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(angiotensin blockade improves cardiac and renal complications of type II **diabetic** rats)

L6 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:245099 HCAPLUS
DOCUMENT NUMBER: 120:245099
TITLE: Benzimidazole derivatives and analogs with antidiabetic and platelet antiaggregant activity, and their preparation and pharmaceutical compositions
INVENTOR(S): Anisimova, Vera Alekseevna; Levchenko, Margarita Valentinovna; Korochina, Tatyana Borisovna; Spasov,

Alexander Alexeyevich; Kovalev, Sergei Gennadyevich; Dudchenko, Galina Petrovna
PATENT ASSIGNEE(S): Adir et Cie., Fr.
SOURCE: Eur. Pat. Appl., 66 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 571253	A1	19931124	EP 1993-401239	19930514
EP 571253	B1	19981104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
FR 2691462	A1	19931126	FR 1992-6036	19920519
FR 2691462	B1	19950609		
FR 2694293	A1	19940204	FR 1992-9488	19920731
FR 2694293	B1	19941007		
AT 172975	E	19981115	AT 1993-401239	19930514
ES 2126636	T3	19990401	ES 1993-401239	19930514
CA 2096475	AA	19931120	CA 1993-2096475	19930518
AU 9338608	A1	19931125	AU 1993-38608	19930518
AU 656466	B2	19950202		
JP 06087859	A2	19940329	JP 1993-151016	19930518
JP 2506263	B2	19960612		
US 5623073	A	19970422	US 1993-63531	19930518
ZA 9303509	A	19931210	ZA 1993-3509	19930519
US 5639756	A	19970617	US 1994-330903	19941028

PRIORITY APPLN. INFO.: FR 1992-6036 19920519
FR 1992-9488 19920731
OTHER SOURCE(S): MARPAT 120:245099
GI



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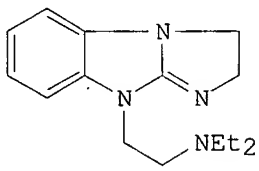

II

AB Members of claimed title compds. I [n = 0, 1; A, B, C, D = H, halo, alkyl, alkoxy, OH, CF3, hydroxyalkyl; Y, Z = H; or YZ = bond; XR1 or XR2 = bond, and other group (R1 or R2) = (un)substituted aminoalkyl, aroylalkyl, arylhydroxyalkyl, phenylalkyl, naphthylalkyl; R3 = H, alkyl, (un)substituted Ph, naphthyl, heteroaryl; R4 = H, (un)substituted aminoalkyl, aminoalkoxycarbonyl, aroyl, heteroaroyl; with many addnl. dependencies and provisos] were prepd. in 71 synthetic examples, mostly as salts, with the corresponding specific free bases also claimed. For example, 2-amino-1-[2-(diethylamino)ethyl]benzimidazole underwent N-alkylation at the 3-position by ClCH2CH2OH (90% yield), and treatment of the resulting alc. with SOCl2 gave the chloroethyl imine 1-[2-(diethylamino)ethyl]-2-imino-3-(2-chloroethyl)benzimidazole-2HCl (100%). Cyclization of the latter as the free base in xylene (92%) gave

title compd. II, isolated as the di-HCl salt. Tests in rats showed I to have hypoglycemic activity comparable to gliclazide, lasting more than 12 h. I showed ID50 of < 10-4 M for inhibition of ADP-induced aggregation of rabbit platelets in vitro, but showed no significant antihypertensive effects in rats. Acute oral toxicity in mice was also said to be very low.

IT **154054-52-1P 154055-18-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as **antidiabetic** and platelet antiaggregant)

L6 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:496629 HCAPLUS
DOCUMENT NUMBER: 91:96629
TITLE: Pharmaceutical composition containing a 2-phenylbenzimidazole derivative
PATENT ASSIGNEE(S): Sandoz A.-G., Switz.
SOURCE: Belg., 10 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 871473	A1	19790423	BE 1978-191297	19781023

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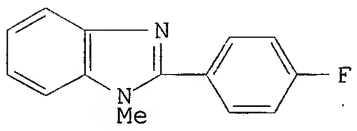

I

AB A compn. for treating of obesity contains I [**724-59-4**]. Thus, tablets were prepd. from I 100, poly(vinylpyrrolidone) 10, lactose 247.5, corn starch 25, talc 15, and Mg stearate 2.5 mg. I at 108 mg/kg orally caused 25% inhibition in the rise of **blood sugar** level of fasted rats given 2g maltose or 200 mg starch/kg.

IT **724-59-4**
RL: PRP (Properties)
(antiobesity and **antidiabetic** effect of)

=> select hit rn l6 1-15
E1 THROUGH E94 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 20:46:13 ON 26 APR 2002
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STRUCTURE FILE UPDATES: 25 APR 2002 HIGHEST RN 408304-53-0
DICTIONARY FILE UPDATES: 25 APR 2002 HIGHEST RN 408304-53-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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SELECT HIT RN L6 1-15

FILE 'REGISTRY' ENTERED AT 20:46:13 ON 26 APR 2002
L8 94 S E1-E94

=> d reg l8 1-94

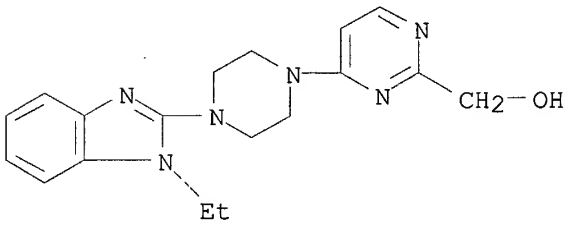
1	RN	**400785-22-0**	REGISTRY
2	RN	**400785-12-8**	REGISTRY
3	RN	**400785-05-9**	REGISTRY
4	RN	**400785-04-8**	REGISTRY
5	RN	**318469-08-8**	REGISTRY
6	RN	**318469-07-7**	REGISTRY
7	RN	**318469-04-4**	REGISTRY
8	RN	**318469-03-3**	REGISTRY
9	RN	**318469-02-2**	REGISTRY
10	RN	**318468-98-3**	REGISTRY
11	RN	**318468-95-0**	REGISTRY
12	RN	**318468-94-9**	REGISTRY
13	RN	**318468-93-8**	REGISTRY
14	RN	**318468-92-7**	REGISTRY
15	RN	**318468-88-1**	REGISTRY
16	RN	**318468-87-0**	REGISTRY
17	RN	**318468-86-9**	REGISTRY
18	RN	**318468-85-8**	REGISTRY
19	RN	**318468-84-7**	REGISTRY
20	RN	**318468-83-6**	REGISTRY
21	RN	**318468-82-5**	REGISTRY
22	RN	**318468-78-9**	REGISTRY
23	RN	**318468-76-7**	REGISTRY
24	RN	**318468-72-3**	REGISTRY
25	RN	**318468-71-2**	REGISTRY
26	RN	**318468-70-1**	REGISTRY
27	RN	**318468-69-8**	REGISTRY
28	RN	**318468-68-7**	REGISTRY
29	RN	**318468-65-4**	REGISTRY
30	RN	**318468-64-3**	REGISTRY
31	RN	**318468-63-2**	REGISTRY
32	RN	**318468-62-1**	REGISTRY
33	RN	**318468-61-0**	REGISTRY
34	RN	**318468-60-9**	REGISTRY
35	RN	**318468-59-6**	REGISTRY

36 RN 318468-58-5 REGISTRY
37 RN 318468-57-4 REGISTRY
38 RN 318468-56-3 REGISTRY
39 RN 318468-54-1 REGISTRY
40 RN 318468-53-0 REGISTRY
41 RN 318468-52-9 REGISTRY
42 RN 318468-51-8 REGISTRY
43 RN 318468-50-7 REGISTRY
44 RN 318468-49-4 REGISTRY
45 RN 318468-48-3 REGISTRY
46 RN 318468-47-2 REGISTRY
47 RN 318468-46-1 REGISTRY
48 RN 318468-44-9 REGISTRY
49 RN 318468-43-8 REGISTRY
50 RN 318468-42-7 REGISTRY
51 RN 318468-41-6 REGISTRY
52 RN 318468-40-5 REGISTRY
53 RN 318468-31-4 REGISTRY
54 RN 318468-30-3 REGISTRY
55 RN 318468-29-0 REGISTRY
56 RN 318468-28-9 REGISTRY
57 RN 318468-26-7 REGISTRY
58 RN 318468-25-6 REGISTRY
59 RN 318468-21-2 REGISTRY
60 RN 318468-20-1 REGISTRY
61 RN 318468-19-8 REGISTRY
62 RN 318468-17-6 REGISTRY
63 RN 318468-16-5 REGISTRY
64 RN 318468-15-4 REGISTRY
65 RN 318468-14-3 REGISTRY
66 RN 318468-13-2 REGISTRY
67 RN 318468-12-1 REGISTRY
68 RN 318468-11-0 REGISTRY
69 RN 318468-10-9 REGISTRY
70 RN 318468-09-6 REGISTRY
71 RN 318468-06-3 REGISTRY
72 RN 314240-70-5 REGISTRY
73 RN 232255-10-6 REGISTRY
74 RN 232255-09-3 REGISTRY
75 RN 232255-08-2 REGISTRY
76 RN 232255-07-1 REGISTRY
77 RN 232255-01-5 REGISTRY
78 RN 232255-00-4 REGISTRY
79 RN 232254-99-8 REGISTRY
80 RN 232254-97-6 REGISTRY
81 RN 232254-96-5 REGISTRY
82 RN 232254-94-3 REGISTRY
83 RN 232254-93-2 REGISTRY
84 RN 232254-91-0 REGISTRY
85 RN 232254-90-9 REGISTRY
86 RN 213247-37-1 REGISTRY
87 RN 154055-18-2 REGISTRY
88 RN 154054-52-1 REGISTRY
89 RN 145909-56-4 REGISTRY
90 RN 144701-48-4 REGISTRY
91 RN 135070-05-2 REGISTRY
92 RN 73384-60-8 REGISTRY
DR 134250-42-3, 112363-11-8
93 RN 57260-68-1 REGISTRY

94 RN **724-59-4** REGISTRY

=> d ide can l8 1 5 10 72 73 79 86 87 88 89

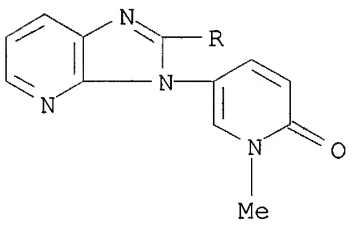
L8 ANSWER 1 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **400785-22-0** REGISTRY
CN 2-Pyrimidinemethanol, 4-[4-(1-ethyl-1H-benzimidazol-2-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H22 N6 O
SR CA
LC STN Files: CA, CAPLUS

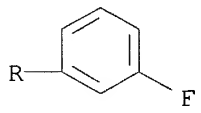


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:200160

L8 ANSWER 5 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **318469-08-8** REGISTRY
CN 2(1H)-Pyridinone, 5-[2-(3-fluorophenyl)-3H-imidazo[4,5-b]pyridin-3-yl]-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H13 F N4 O
SR CA
LC STN Files: CA, CAPLUS



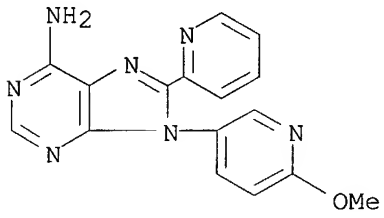


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:100881

L8 ANSWER 10 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **318468-98-3** REGISTRY
CN 9H-Purin-6-amine, 9-(6-methoxy-3-pyridinyl)-8-(2-pyridinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H13 N7 O
SR CA
LC STN Files: CA, CAPLUS

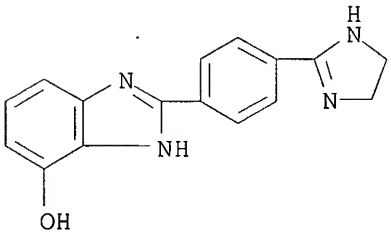


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:100881

L8 ANSWER 72 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **314240-70-5** REGISTRY
CN 1H-Benzimidazol-4-ol, 2-[4-(4,5-dihydro-1H-imidazol-2-yl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)
MF C16 H14 N4 O . Cl H
SR CA
LC STN Files: CA, CAPLUS



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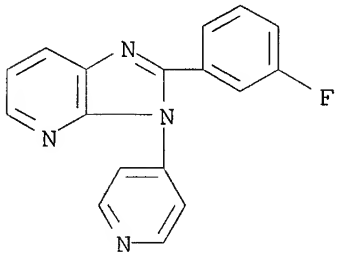
1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:71593

L8 ANSWER 73 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **232255-10-6** REGISTRY
CN 3H-Imidazo[4,5-b]pyridine, 2-(3-fluorophenyl)-3-(4-pyridinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H11 F N4
CI COM
SR CA
LC STN Files: CA, CAPLUS

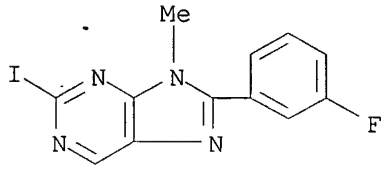


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:116251

L8 ANSWER 79 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **232254-99-8** REGISTRY
CN 9H-Purine, 8-(3-fluorophenyl)-2-iodo-9-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H8 F I N4
SR CA
LC STN Files: CA, CAPLUS

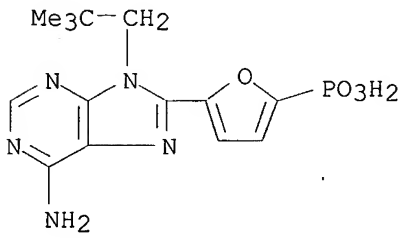


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:116251

L8 ANSWER 86 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **213247-37-1** REGISTRY
CN Phosphonic acid, [5-[6-amino-9-(2,2-dimethylpropyl)-9H-purin-8-yl]-2-furanyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H18 N5 O4 P
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:123595

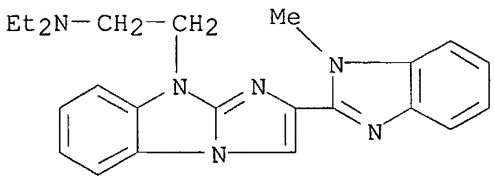
REFERENCE 2: 135:348869

REFERENCE 3: 133:84284

REFERENCE 4: 131:185194

REFERENCE 5: 129:260281

L8 ANSWER 87 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **154055-18-2** REGISTRY
CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-(1-methyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C23 H26 N6
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

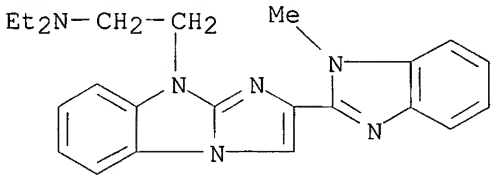


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:245099

L8 ANSWER 88 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **154054-52-1** REGISTRY
CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-(1-methyl-1H-benzimidazol-2-yl)-, dihydrobromide (9CI) (CA INDEX NAME)
MF C23 H26 N6 . 2 Br H
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL
CRN (154055-18-2)

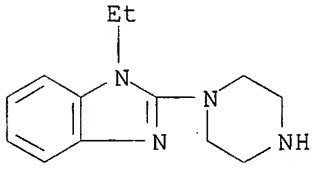


●2 HBr

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:245099

L8 ANSWER 89 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **145909-56-4** REGISTRY
CN 1H-Benzimidazole, 1-ethyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H18 N4
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:200160

REFERENCE 2: 135:92650

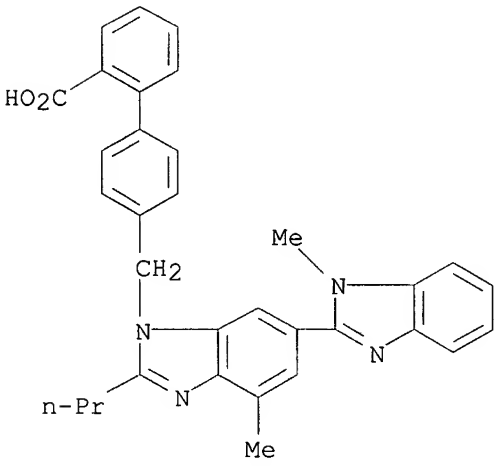
REFERENCE 3: 128:290174

REFERENCE 4: 126:69743

REFERENCE 5: 118:101955

=> d ide can 18 90 91 92 93 94

L8 ANSWER 90 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **144701-48-4** REGISTRY
CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[(1,4'-dimethyl-2'-propyl[2,6'-bi-1H-benzimidazol]-1'-yl)methyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4'-[[4-Methyl-6-(1-methyl-2-benzimidazolyl)-2-propyl-1-benzimidazolyl]methyl]-2-biphenylcarboxylic acid
CN BIBR 277
CN BIBR 277SE
CN Telmisartan
FS 3D CONCORD
MF C33 H30 N4 O2
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CBNB, CHEMINFORMRX, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, SYNTHLINE, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

119 REFERENCES IN FILE CA (1967 TO DATE)
119 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:272916

REFERENCE 2: 136:252567

REFERENCE 3: 136:226254

REFERENCE 4: 136:205430

REFERENCE 5: 136:194252

REFERENCE 6: 136:194251

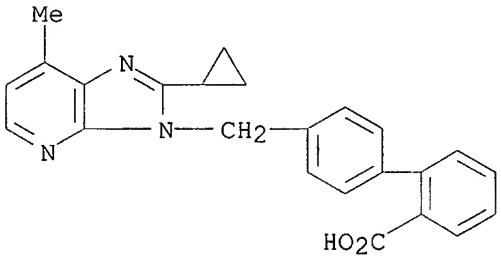
REFERENCE 7: 136:177691

REFERENCE 8: 136:112467

REFERENCE 9: 136:112466

REFERENCE 10: 136:112440

L8 ANSWER 91 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **135070-05-2** REGISTRY
CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[(2-cyclopropyl-7-methyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3H-Imidazo[4,5-b]pyridine, [1,1'-biphenyl]-2-carboxylic acid deriv.
OTHER NAMES:
CN 57G709
CN E 1477
CN E 4177
MF C24 H21 N3 O2
SR CA
LC STN Files: ADISINSIGHT, ANABSTR, BIOSIS, CA, CAPLUS, DRUGNL, DRUGUPDATES, EMBASE, MEDLINE, PHAR, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

38 REFERENCES IN FILE CA (1967 TO DATE)
38 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:308910

REFERENCE 2: 135:308909

REFERENCE 3: 133:140268

REFERENCE 4: 133:129687

REFERENCE 5: 133:79362

REFERENCE 6: 133:68961

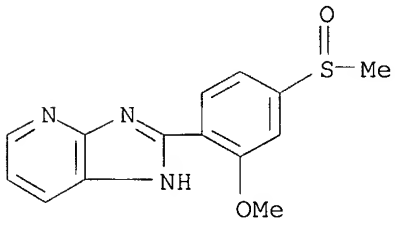
REFERENCE 7: 132:175862

REFERENCE 8: 132:102609

REFERENCE 9: 132:102605

REFERENCE 10: 132:31209

L8 ANSWER 92 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **73384-60-8** REGISTRY
CN 1H-Imidazo[4,5-b]pyridine, 2-[2-methoxy-4-(methylsulfinyl)phenyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN AR-L 115
CN AR-L 115BS
CN Sulmazole
CN Vardax
FS 3D CONCORD
DR 134250-42-3, 112363-11-8
MF C14 H13 N3 O2 S
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

151 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
151 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:241690

REFERENCE 2: 135:298797

REFERENCE 3: 132:216756

REFERENCE 4: 131:111456

REFERENCE 5: 130:321224

REFERENCE 6: 130:247048

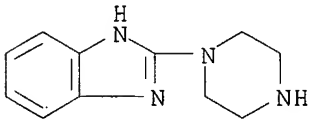
REFERENCE 7: 128:303859

REFERENCE 8: 128:239908

REFERENCE 9: 128:136100

REFERENCE 10: 127:130729

L8 ANSWER 93 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **57260-68-1** REGISTRY
CN 1H-Benzimidazole, 2-(1-piperazinyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2-Benzimidazolyl)piperazine
CN 2-Piperazin-1-yl-1H-benzimidazole
FS 3D CONCORD
MF C11 H14 N4
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
10 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:200479

REFERENCE 2: 136:200160

REFERENCE 3: 136:31701

REFERENCE 4: 135:366316

REFERENCE 5: 134:311197

REFERENCE 6: 133:252456

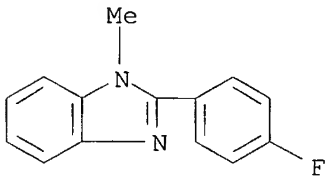
REFERENCE 7: 133:252420

REFERENCE 8: 128:290174

REFERENCE 9: 126:69743

REFERENCE 10: 83:201749

L8 ANSWER 94 OF 94 REGISTRY COPYRIGHT 2002 ACS
RN **724-59-4** REGISTRY
CN 1H-Benzimidazole, 2-(4-fluorophenyl)-1-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzimidazole, 2-(p-fluorophenyl)-1-methyl- (7CI, 8CI)
OTHER NAMES:
CN 1-Methyl-2-(p-fluorophenyl)benzimidazole
FS 3D CONCORD
MF C14 H11 F N2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 125:57829

REFERENCE 2: 108:168981

REFERENCE 3: 94:71484

REFERENCE 4: 93:173761

REFERENCE 5: 91:96629

REFERENCE 6: 91:9500

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 20:51:42 ON 26 APR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

strictly prohibited.

FILE COVERS 1907 - 26 Apr 2002 VOL 136 ISS 18
FILE LAST UPDATED: 25 Apr 2002 (20020425/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=>
=> d stat que nos
L1 STR
L2 34579 SEA FILE=REGISTRY SSS FUL L1
L3 STR
L4 20432 SEA FILE=REGISTRY SUB=L2 SSS FUL L3
L5 9122 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
L6 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L5(L)(?DIABET? OR BLOOD(W)SUGAR)
L7 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 AND (?DIABET? OR BLOOD(W)SUGAR)
L9 42 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?MEDIC? OR ?PHARM? OR ?DRUG? OR ?THERAP?)
L10 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT L6
L11 428 SEA FILE=HCAPLUS ABB=ON PLU=ON L5(L)(?MEDIC? OR ?PHARM? OR ?DRUG? OR ?THERAP?)
L12 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L10

=> d ibib abs hitrn l12 1-9

L12 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:185688 HCAPLUS
DOCUMENT NUMBER: 136:252567
TITLE: Methods for **drug** administration and distribution based on monitoring blood viscosity and other parameters for diagnostics and treatment
INVENTOR(S): Kensey, Kenneth
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 46 pp., Cont.-in-part of U.S. Ser. No. 819,924.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002032149	A1	20020314	US 2001-841389	20010424
CA 2301161	AA	19990304	CA 1998-2301161	19980826
JP 2001514384	T2	20010911	JP 2000-507994	19980826
NO 2000000944	A	20000225	NO 2000-944	20000225
US 2001039828	A1	20011115	US 2001-789350	20010221
US 2002007664	A1	20020124	US 2001-897164	20010702

PRIORITY APPLN. INFO.: US 1997-919906 A2 19970828

US 1999-439795	A2	19991112
US 2000-501856	A2	20000210
US 2000-628401	A2	20000801
US 2000-727950	A2	20001201
US 2001-819924	A2	20010328
US 1997-966076	A	19971107
WO 1998-US17657	W	19980826
KR 2000-16044	A	20000329
US 2000-228612P	P	20000828
US 2001-789350	A2	20010221

AB Various methods are provided for detg. and utilizing the viscosity of the circulating blood of a living being, i.e., a human, over a range of shear rates for diagnostics and treatment, such as detecting/reducing blood viscosity, work of the heart, contractility of the heart, for detecting/reducing the surface tension of the blood, for detecting plasma viscosity, for explaining/countering endothelial cell dysfunction, for providing high and low blood vessel wall shear stress data, red blood cell deformability data, lubricity of blood, and for treating different ailments such as peripheral arterial disease in combination with administering to a living being at least one **pharmaceutically** acceptable agent. Agents **pharmaceutically** effective to regulate at least one of the afore mentioned blood parameters are used to adjust distribution of a substance through the bloodstream. For example, when blood viscosity is a blood flow parameter monitored, an agent is selected from i.v. diluents, red blood cell deformability agents, antiurea agents, oral contraceptives, **antidiabetic** agents, antiarrhythmics, antihypertensives, antihyperlipidemics, antiplatelet agents, appetite suppressants, antiobesity agents, blood modifiers, smoking deterrent agents, and nutritional supplements.

IT **144701-48-4**, Telmisartan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(app. and methods for monitoring blood viscosity and other parameters in **drug** delivery for diagnostics and treatment)

L12 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:157602 HCAPLUS
DOCUMENT NUMBER: 136:205430
TITLE: **Pharmaceutical** compositions containing AT-receptor antagonist or insulin secretion enhancers
INVENTOR(S): Allison, Malcolm; Gatlin, Marjorie Regan
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002015933	A2	20020228	WO 2001-EP9587	20010820

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-643641 A 20000822

AB A **pharmaceutical** compn. comprises as active ingredients an AT1-receptor antagonist or a salt, an insulin secretion enhancer or a its salt or an insulin sensitizer or its salt. Thus, tablets contained Starlix DS 60, lactose monohydrate 141.5, microcryst. cellulose 71, Povidone-K30 12, and Croscarmellose sodium 18.4, colloidal SiO2 6.4, Mg stearate 5.7, and Opadry 9 mg.

IT **144701-48-4**, Telmisartan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**pharmaceutical** compns. contg. AT-receptor antagonist or insulin secretion enhancers)

L12 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:157563 HCAPLUS
DOCUMENT NUMBER: 136:194251
TITLE: **Pharmaceutical** combination of angiotensin II antagonists and angiotensin I converting enzyme inhibitors
INVENTOR(S): Boehm, Peter; Meinicke, Wolf Thomas; Riedel, Axel
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002015891	A2	20020228	WO 2001-EP9428	20010816

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2000-20691 A 20000822
DE 2001-10108215 A 20010220

AB The invention relates to a method of treatment of indications which can be pos. influenced by inhibition of AT1 mediated effects with maintenance of AT2 receptor mediated effects of angiotensin II and by ACE inhibition, thus also increasing bradykinin mediated effects, e.g. to reduce the incidence of stroke, acute myocardial infarction or cardiovascular death, or of indications assocd. with the increase of AT1 receptors in the sub-epithelial area or increase of AT2 receptors in the epithelia, comprising co-administration of effective amts. of an angiotensin II antagonist and an ACE inhibitor, **pharmaceutical** compns. contg. an Angiotensin II antagonist together with an ACE inhibitor and the use of an Angiotensin II antagonist and an ACE inhibitor for the manuf. of corresponding **pharmaceutical** compns.

IT **144701-48-4**, Telmisartan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**pharmaceutical** combination of angiotensin II antagonists and angiotensin I converting enzyme inhibitors)

L12 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:762798 HCAPLUS
DOCUMENT NUMBER: 135:308910
TITLE: **Pharmaceutical** compositions containing an aldosterone synthase inhibitor and an AT1-receptor antagonist
INVENTOR(S): Steele, Ronald Edward
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001076574	A2	20011018	WO 2001-EP4116	20010410

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-196742P P 20000412
AB The invention relates to a **pharmaceutical** compn., of (i) an aldosterone synthase inhibitor or a **pharmaceutically** acceptable salt thereof either alone or in combination with (ii) an AT1-receptor antagonist combined with a diuretic, or in each case, a **pharmaceutically** acceptable salt thereof and (iii) a **pharmaceutically** acceptable carrier. A **pharmaceutical** compn. comprising an aldosterone synthase inhibitor or a **pharmaceutically** acceptable salt thereof is used for the prevention of, delay of progression of, and treatment of a disease or condition selected from the group consisting of hypertension, congestive heart failure, renal failure, esp. chronic renal failure, restenosis after percutaneous transluminal angioplasty, and restenosis after coronary artery bypass surgery, atherosclerosis, insulin resistance and syndrome X, **diabetes** mellitus type 2, obesity, nephropathy, hypothyroidism, myocardial infarction, etc. For example, a hard gelatin capsules were prepd. contg. valsartan 80.0 mg, microcryst. cellulose 110.0 mg, Polyvidone K30 45.2 mg, sodium lauryl sulfate 1.2 mg, crospovidone 26.0 mg, and magnesium stearate 2.6 mg by a granulation method.
IT **135070-05-2**, E 1477 **144701-48-4**, Telmisartan
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral compns. contg. aldosterone synthase inhibitor and AT1-receptor antagonist for **therapeutic** uses)

L12 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:762797 HCAPLUS
DOCUMENT NUMBER: 135:308909
TITLE: **Pharmaceutical** combinations containing

AT1-receptor antagonist
INVENTOR(S): De Gasparo, Marc; Graves, Kurt C.
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001076573	A2	20011018	WO 2001-EP4115	20010410

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-196743P P 20000412

AB The invention relates to a combination of at least 2 **therapeutic** combination components selected from the group consisting of an AT1-receptor antagonist or an AT1 receptor antagonist combined with a diuretic or, in each case, a salt, a HMG-CoA reductase inhibitor or a salt and an ACE inhibitor or a salt for the prevention of, delay of progression of, treatment of selected diseases and conditions. Thus, tablets were prepd. by granulation of the mixt. of valsartan 80.00, Avicel PH-102 54.00 Crospovidone 20.00, Aerosil-200 0.75, and Mg stearate 2.5 mg/unit, and blending this compn. with a mixt. of Aerosil-200 0.75, Mg stearate 2.00, and Diolack pale red 00F34899 7.00 mg/unit.

IT **135070-05-2**, E 1477 **144701-48-4**, Telmisartan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**pharmaceutical** combinations contg. AT1-receptor antagonist)

L12 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:396644 HCAPLUS
DOCUMENT NUMBER: 135:24671
TITLE: Solid carriers for improved delivery of active ingredients in **pharmaceutical** compositions
INVENTOR(S): Patel, Manesh V.; Chen, Feng-jing
PATENT ASSIGNEE(S): Lipocine, Inc., USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001037808	A1	20010531	WO 2000-US32255	20001122

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,

ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6248363 B1 20010619 US 1999-447690 19991123
PRIORITY APPLN. INFO.: US 1999-447690 A 19991123

AB The present invention provides solid **pharmaceutical** compns. for improved delivery of a wide variety of **pharmaceutical** active ingredients contained therein or sep. administered. In one embodiment, the solid **pharmaceutical** compn. includes a solid carrier, the solid carrier including a substrate and an encapsulation coat on the substrate. The encapsulation coat can include different combinations of **pharmaceutical** active ingredients, hydrophilic surfactant, lipophilic surfactants and triglycerides. In another embodiment, the solid **pharmaceutical** compn. includes a solid carrier, the solid carrier being formed of different combinations of **pharmaceutical** active ingredients, hydrophilic surfactants, lipophilic surfactants and triglycerides. The compns. of the present invention can be used for improved delivery of hydrophilic or hydrophobic **pharmaceutical** active ingredients, such as **drugs**, nutritionals, cosmeceuticals and diagnostic agents. A compn. contained glyburide 1, PEG 40 stearate 33, glycerol monolaurate 17, and nonpareil seed 80 g.

IT **144701-48-4**, Telmisartan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solid carriers for improved delivery of active ingredients in **pharmaceutical** compns.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:608551 HCAPLUS
DOCUMENT NUMBER: 133:213151
TITLE: **Pharmaceutical** compositions and methods for improved delivery of hydrophobic **therapeutic** agents
INVENTOR(S): Patel, Manesh V.; Chen, Feng-Jing
PATENT ASSIGNEE(S): Lipocine, Inc., USA
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050007	A1	20000831	WO 2000-US165	20000105

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6294192	B1	20010925	US 1999-258654	19990226
EP 1158959	A1	20011205	EP 2000-901394	20000105

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO
US 2002012680 A1 20020131 US 2001-898553 20010702
PRIORITY APPLN. INFO.: US 1999-258654 A 19990226
WO 2000-US165 W 20000105

AB The present invention relates to triglyceride-free **pharmaceutical** compns. for delivery of hydrophobic **therapeutic** agents. Compns. of the present invention include a hydrophobic **therapeutic** agent and a carrier, where the carrier is formed from a combination of a hydrophilic surfactant and a hydrophobic surfactant. Upon diln. with an aq. solvent, the compn. forms a clear, aq. dispersion of the surfactants contg. the **therapeutic** agent. The invention also provides methods of treatment with hydrophobic **therapeutic** agents using these compns. A **pharmaceutical** compn. contained cyclosporin 0.14, Cremophor RH-40 0.41, Arlacel186 0.29, sodium taurocholate 0.26, and propylene glycol 0.46 mg.

IT **144701-48-4**, Telmisartan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**pharmaceutical** compns. and methods for improved delivery of hydrophobic **therapeutic** agents)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:124074 HCAPLUS
DOCUMENT NUMBER: 108:124074
TITLE: General **pharmacology** of 1-(2-ethoxyethyl)-2-(4-methyl-1-homopiperazinyl)benzimidazole difumarate. 2nd Communication: Effects on the circulation and the other systems
AUTHOR(S): Saito, T.; Fukuda, T.; Tajima, S.; Sukamoto, T.; Yamashita, A.; Kanazawa, T.; Morimoto, Y.; Shimohara, K.; Nishimura, N.; et al.
CORPORATE SOURCE: Pharm. Res. Cent., Kanebo Ltd., Osaka, Japan
SOURCE: Arzneim.-Forsch. (1988), 38(2), 267-72
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The title **drug** (KB-2413) as well as ketotifen and chlorpheniramine transiently inhibited respiration at 3 mg/kg, i.v., and slightly decreased blood pressure in dogs. KB-2413 slightly decreased heart rate in dogs, but ketotifen slightly increased it. KB-2413, at 100 mg/kg orally, slightly decreased the vol. of gastric juice in rats and dose-dependently increased biliary secretion in rats at 10-100 mg/kg. Ketotifen and chlorpheniramine decreased biliary secretion. KB-2413 inhibited the spontaneous movements of various isolated smooth muscles at a high concn. (10-4 g/mL). The autonomic system in cats and the motor nervous system in rats were not influenced by KB-2413 at 3 mg/kg, i.v. The blood clotting system, **blood sugar** level, urine vol., and urinary electrolytes in rats were not affected by KB-2413 at 10-100 mg/kg, orally. KB-2413 inhibited carrageenin-induced rat paw edema at 100 mg/kg orally. In conclusion, KB-2413 showed less potent effects on the circulation and the other systems than ketotifen and chlorpheniramine, and apparently has no serious side effects.

IT **87233-62-3**, KB 2413
RL: BIOL (Biological study)
(circulation response to and **pharmacol.** of)

L12 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1973:473473 HCAPLUS

DOCUMENT NUMBER: 79:73473
TITLE: Cyclophosphates. V. In vivo metabolic and cardiovascular effects of new cyclophosphates
AUTHOR(S): Paoletti, R.; Berti, F.; Spano, P. F.
CORPORATE SOURCE: Inst. Pharmacol. Pharmacognosy, Univ. Milan, Milan, Italy
SOURCE: Pharmacol. Res. Commun. (1973), 5(1), 87-100
CODEN: PLRCAT
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Studies on the metabolic and cardiovascular effects of cyclic nucleotides in the rat revealed that only cyclic 3',5'-AMP (I) [60-92-4] had a pronounced hyperglycemic activity, and that cyclic 3',5'-GMP [7665-99-8] increased the plasma steroid levels to a greater extent than I. A long lasting effect on plasma steroid levels was demonstrated with 6-(3',4'-dimethoxyphenyl)ethylaminocyclic purine-9-riboside-3',5'-monophosphate [34051-26-8] at doses where there was no effect on the cardiovascular parameters or blood glucose levels. The av. hyperglycemic effects with 8-substituted nucleotides were lower than those with 6-substituted ones, despite a high resistance to phosphodiesterase [9025-82-5].

IT **31319-97-8 31357-06-9 32115-25-6**
38124-16-2 38124-18-4
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**pharmacol.** of)

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E95 THROUGH E102 ASSIGNED

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DICTIONARY FILE UPDATES: 25 APR 2002 HIGHEST RN 408304-53-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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1 144701-48-4/BI
(144701-48-4/RN)

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                1 135070-05-2/BI
                    (135070-05-2/RN)
                1 31319-97-8/BI
                    (31319-97-8/RN)
                1 31357-06-9/BI
                    (31357-06-9/RN)
                1 32115-25-6/BI
                    (32115-25-6/RN)
                1 38124-16-2/BI
                    (38124-16-2/RN)
                1 38124-18-4/BI
                    (38124-18-4/RN)
                1 87233-62-3/BI
                    (87233-62-3/RN)
L13             8 (144701-48-4/BI OR 135070-05-2/BI OR 31319-97-8/BI OR 31357-06-9
                  /BI OR 32115-25-6/BI OR 38124-16-2/BI OR 38124-18-4/BI OR 87233-
                  62-3/BI)

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L13  ANSWER 1 OF 8  REGISTRY  COPYRIGHT 2002 ACS
RN   144701-48-4  REGISTRY
CN   [1,1'-Biphenyl]-2-carboxylic acid, 4'-[(1,4'-dimethyl-2'-propyl[2,6'-bi-1H-
     benzimidazol]-1'-yl)methyl]- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   4'-[[4-Methyl-6-(1-methyl-2-benzimidazolyl)-2-propyl-1-
     benzimidazolyl]methyl]-2-biphenylcarboxylic acid
CN   BIBR 277
CN   BIBR 277SE
CN   Telmisartan
FS   3D CONCORD
MF   C33 H30 N4 O2
SR   CA
LC   STN Files:   ADISINSIGHT, ADISNEWS, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
       CAPLUS, CBNB, CHEMINFORMRX, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU,
       DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, SYNTHLINE,
       TOXCENTER, USAN, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   WHO
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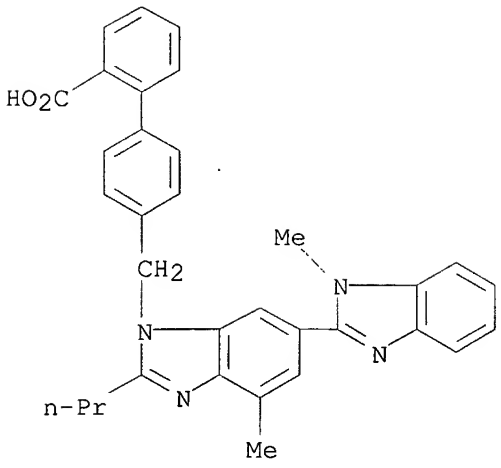


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

119 REFERENCES IN FILE CA (1967 TO DATE)
119 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:272916

REFERENCE 2: 136:252567

REFERENCE 3: 136:226254

REFERENCE 4: 136:205430

REFERENCE 5: 136:194252

REFERENCE 6: 136:194251

REFERENCE 7: 136:177691

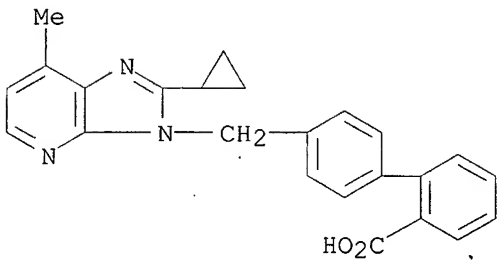
REFERENCE 8: 136:112467

REFERENCE 9: 136:112466

REFERENCE 10: 136:112440

L13 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **135070-05-2** REGISTRY
CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[(2-cyclopropyl-7-methyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3H-Imidazo[4,5-b]pyridine, [1,1'-biphenyl]-2-carboxylic acid deriv.
OTHER NAMES:
CN 57G709
CN E 1477
CN E 4177
MF C24 H21 N3 O2
SR CA
LC STN Files: ADISINSIGHT, ANABSTR, BIOSIS, CA, CAPLUS, DRUGNL,

DRUGUPDATES, EMBASE, MEDLINE, PHAR, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

38 REFERENCES IN FILE CA (1967 TO DATE)
38 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:308910

REFERENCE 2: 135:308909

REFERENCE 3: 133:140268

REFERENCE 4: 133:129687

REFERENCE 5: 133:79362

REFERENCE 6: 133:68961

REFERENCE 7: 132:175862

REFERENCE 8: 132:102609

REFERENCE 9: 132:102605

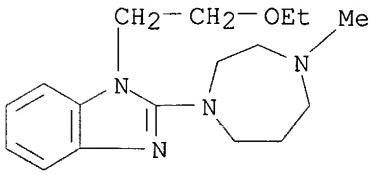
REFERENCE 10: 132:31209

L13 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **87233-62-3** REGISTRY
CN 1H-Benzimidazole, 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-1,4-Diazepine, 1H-benzimidazole deriv.
CN 1H-Benzimidazole, 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-, (E)-2-butenedioate (1:2)
OTHER NAMES:
CN AL 3432A
CN Emedastine difumarate
CN KB 2413
CN KG 2413
CN LY 188695
CN Rapimine
FS STEREOSEARCH
MF C17 H26 N4 O . 2 C4 H4 O4
CI COM
LC STN Files: ADISINSIGHT, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,

BIOTECHNO, CA, CAPLUS, CASREACT, CIN, DDFU, DIOGENES, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)

CM 1

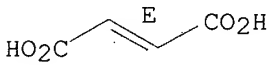
CRN 87233-61-2
CMF C17 H26 N4 O



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



59 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
59 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:226461

REFERENCE 2: 136:95744

REFERENCE 3: 136:708

REFERENCE 4: 135:251374

REFERENCE 5: 135:127234

REFERENCE 6: 134:242717

REFERENCE 7: 133:242724

REFERENCE 8: 133:94398

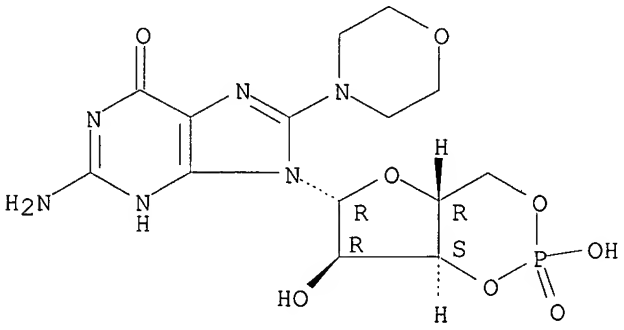
REFERENCE 9: 132:212608

REFERENCE 10: 131:165275

L13 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **38124-18-4** REGISTRY
CN Guanosine, 8-(4-morpholinyl)-, cyclic 3',5'-(hydrogen phosphate) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN 4H-Furo[3,2-d]-1,3,2-dioxaphosphorin, guanosine deriv.
OTHER NAMES:
CN 8-Morpholino-guanosine-cyclic-3',5'-monophosphate
CN 8-Morpholinoguanosine 3',5'-monophosphate
FS STEREOSEARCH
DR 77836-29-4
MF C14 H19 N6 O8 P
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 104:2775

REFERENCE 2: 95:2508

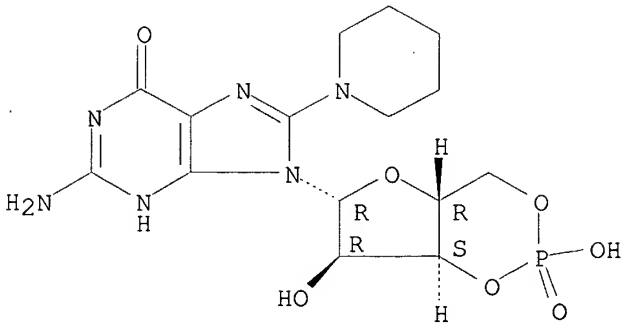
REFERENCE 3: 81:59961

REFERENCE 4: 79:73473

REFERENCE 5: 77:135120

L13 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **38124-16-2** REGISTRY
CN Guanosine, 8-(1-piperidinyl)-, cyclic 3',5'-(hydrogen phosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4H-Furo[3,2-d]-1,3,2-dioxaphosphorin, guanosine deriv.
OTHER NAMES:
CN 8-Piperidino-guanosine-cyclic-3',5'-monophosphate
CN 8-Piperidinocyclic GMP
CN Cyclic 8-piperidino-3',5'-GMP
FS STEREOSEARCH
MF C15 H21 N6 O7 P
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

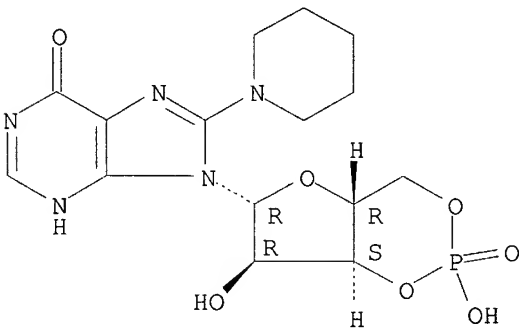
REFERENCE 1: 89:123843

REFERENCE 2: 79:73473

REFERENCE 3: 77:135120

L13 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **32115-25-6** REGISTRY
CN Inosine, 8-(1-piperidinyl)-, cyclic 3',5'-(hydrogen phosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4H-Furo[3,2-d]-1,3,2-dioxaphosphorin, inosine deriv.
CN Inosine, 8-piperidino-, cyclic 3',5'-(hydrogen phosphate) (8CI)
OTHER NAMES:
CN 8-Piperidinoinosine 3',5'-monophosphate
CN 8-Piperidinoinosine cyclic 3',5'-phosphate
CN Cyclic 8-piperidino-3',5'-IMP
FS STEREOSEARCH
MF C15 H20 N5 O7 P
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 81:59961

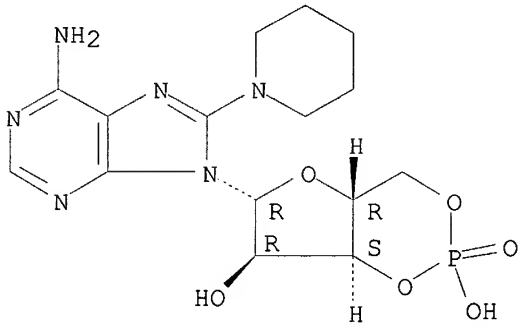
REFERENCE 2: 79:73473

REFERENCE 3: 74:94726

REFERENCE 4: 74:28243

L13 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **31357-06-9** REGISTRY
CN Adenosine, 8-(1-piperidinyl)-, cyclic 3',5'-(hydrogen phosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4H-Furo[3,2-d]-1,3,2-dioxaphosphorin, adenosine deriv.
CN Adenosine, 8-piperidino-, cyclic 3',5'-(hydrogen phosphate) (8CI)
OTHER NAMES:
CN 8-Piperidino-cyclic AMP
CN 8-Piperidinoadenosine 3',5'-monophosphate
CN Cyclic 8-piperidino-3',5'-AMP
FS STEREOSEARCH
MF C15 H21 N6 O6 P
LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER

Absolute stereochemistry.



28 REFERENCES IN FILE CA (1967 TO DATE)
28 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:234318

REFERENCE 2: 131:208914

REFERENCE 3: 129:285575

REFERENCE 4: 127:12971

REFERENCE 5: 125:4332

REFERENCE 6: 124:336374

REFERENCE 7: 124:282685

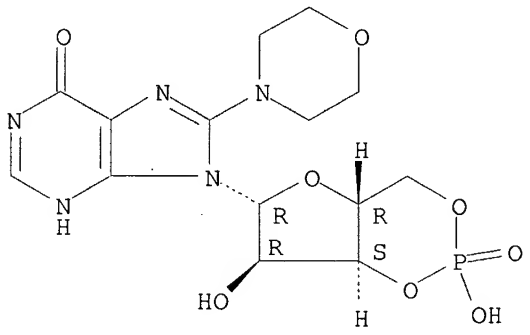
REFERENCE 8: 124:21042

REFERENCE 9: 124:5727

REFERENCE 10: 122:306277

L13 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2002 ACS
RN **31319-97-8** REGISTRY
CN Inosine, 8-(4-morpholinyl)-, cyclic 3',5'-(hydrogen phosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4H-Furo[3,2-d]-1,3,2-dioxaphosphorin, inosine deriv.
CN Inosine, 8-morpholino-, cyclic 3',5'-(hydrogen phosphate) (8CI)
OTHER NAMES:
CN 8-Morpholinoinosine 3',5'-monophosphate
CN 8-Morpholinoinosine cyclic 3',5'-phosphate
CN Cyclic 8-morpholino-3',5'-IMP
FS STEREOSEARCH
MF C14 H18 N5 O8 P
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 79:73473

REFERENCE 2: 74:94726

REFERENCE 3: 74:28243

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FILE 'HCAPLUS' ENTERED AT 21:06:38 ON 26 APR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 26 Apr 2002  VOL 136 ISS 18
FILE LAST UPDATED: 25 Apr 2002  (20020425/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> d stat que l17
L15          55 SEA FILE=REGISTRY ABB=ON  PLU=ON  (6(W)AMINO?)(L)(FLUORO?(2A)PH
                ENYL? OR FLUOROPHENYL?)(L)PURIN?(L)(PYRIDIN? OR CYCLOBUTAN?)
L16           2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L15 AND (METHYL?(L)DIHYDRO?
                OR PROPEN?(L)ETHYN?)
L17           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16


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=>

=> d ibib abs hitrn l17

L17  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2001:31502  HCAPLUS
DOCUMENT NUMBER:          134:100881
TITLE:                    Preparation of fused imidazole compounds and remedies
                          for diabetes mellitus
INVENTOR(S):              Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji;
                          Watanabe, Nobuhisa; Inoue, Takashi; Horizoe, Tatsuo;
                          Yasuda, Nobuyuki; Oohashi, Kaya; Minami, Hiroe;
                          Nagaoka, Junsaku; Murakami, Manabu; Kobayashi,
                          Seiichi; Tanaka, Isao; Kawata, Tsutomu; Shimomura,
                          Naoyuki; Akamatsu, Hirofumi; Ozeki, Naoki; Shimizu,
                          Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi,
                          Shigeto; Naito, Toshihiko
PATENT ASSIGNEE(S):       Eisai Co., Ltd., Japan
SOURCE:                   PCT Int. Appl., 130 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
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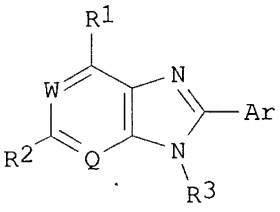
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002400	A1	20010111	WO 2000-JP4358	20000630

W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: JP 1999-188484 A 19990702
JP 2000-143495 A 20000516
JP 2000-182786 A 20000619
OTHER SOURCE(S): MARPAT 134:100881
GI



I

AB Novel fused imidazole compds. such as purine derivs. of general formula (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un)substituted C1-8 alkyl, (un)substituted NH2; R2 = H, halo, (un)substituted NH2, (un)substituted C2-8 alkenyl, (un)substituted C3-8 alkynyl, (un)substituted C1-8 alkyl; R3 = (un)substituted C3-8 alkynyl, C3-8 alkenyl, (un)substituted C1-8 alkyl, (un)substituted aryl, (un)substituted heteroaryl, etc.; Ar = (un)substituted aryl, (un)substituted heteroaryl, optionally halo- or C1-6 alkyl-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; Q, W = N, CH; some proviso are given] are prepd. These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of diabetes mellitus and complications of diabetes. Thus, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temp. for 1 h, ice-cooled, treated with NaH at 0-6.degree. for 30 min, and methylated by Me iodide at room temp. for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2-pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to 47.3.+-.7.2% of the control animal.

IT **318468-38-1P 318468-39-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of fused imidazole compds. as antagonists of adenosine A2 receptors and remedies for diabetes mellitus)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil reg
FILE 'REGISTRY' ENTERED AT 21:07:00 ON 26 APR 2002

STRUCTURE FILE UPDATES: 25 APR 2002 HIGHEST RN 408304-53-0
DICTIONARY FILE UPDATES: 25 APR 2002 HIGHEST RN 408304-53-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

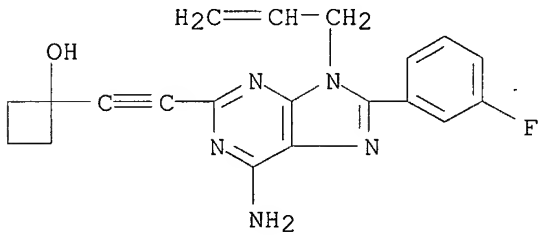
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can l16 1-2

L16 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 318468-39-2 REGISTRY
CN **Cyclobutanol, 1-[[6-amino-8-(3-fluorophenyl)-9-(2-propenyl)-9H-purin-2-yl]ethynyl]- (9CI)** (CA INDEX NAME)
FS 3D CONCORD
MF C20 H18 F N5 O
CI COM
SR CA
LC STN Files: CA, CAPLUS

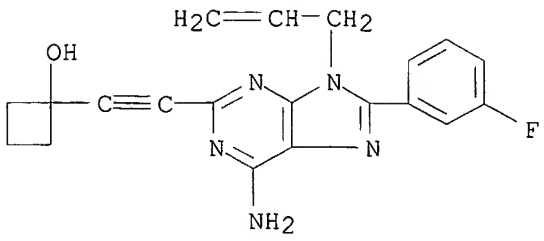


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:100881

L16 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 318468-38-1 REGISTRY
CN **Cyclobutanol, 1-[[6-amino-8-(3-fluorophenyl)-9-(2-propenyl)-9H-purin-2-yl]ethynyl]-, monohydrochloride (9CI)** (CA INDEX NAME)
MF C20 H18 F N5 O . Cl H
SR CA
LC STN Files: CA, CAPLUS
CRN (318468-39-2)



● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:100881